

U.S. Appln. No. 09/924,823
RCE Dated April 20, 2005
Reply to Office Action of Feb. 04, 2005
Docket No. BOC9-2000-0083 (218)

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) In a relational database management system (RDBMS), a method of processing related records comprising:

an RDBMS receiving a plurality of related records;

the RDBMS inserting said plurality of related records into a single table of [[an]]
the RDBMS;

the RDBMS associating said plurality of related records as a set within said single
table using a published function of said RDBMS; and

the RDBMS receiving a triggering event from an application program, wherein the
application program specifies one of the related records and a processing action to be
performed by the RDBMS against the specified record;

responsive to the triggering event, the RDBMS automatically purging non-
specified ones of the related records, condition, selectively purging particular related
records of said set from said single table

2. (Currently Amended) The method of claim 1, wherein ~~the triggering
condition identifies at least one of said plurality of related records and said purging step
purges non-identified~~ all related records of said set except for said specified record.

3. (Original) The method of claim 1, wherein said purging step purges each one of
said plurality of related records.

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4. (Currently Amended) The method of claim 1, wherein said table includes data type for specifying said plurality of related records and said associating step further comprises the RDBMS assigning to each one of said plurality of related records a common identifier conforming with said data type, wherein said common identifier is unique to said set.
5. (Currently Amended) The method of claim 1, ~~further comprising: wherein said published function is accessible to front-end systems, wherein said front end system identifies the plurality of related records that the RDBMS associates as the set, wherein the published function also permits the front end system to disassociate~~ ~~disassociating~~ selected records from said set.
6. (Original) The method of claim 1, further comprising:
deleting throughout said RDBMS, records linked to said purged records using referential integrity rules.
7. (Original) The method of claim 1, said associating step further comprising:
associating selected records of said set as a subset wherein said particular related records of said purging step include at least one selected record of said subset.
8. (Currently Amended) In a relational database management system (RDBMS), a method of processing related records comprising:
the RDBMS receiving a plurality of ~~related~~ records;
the RDBMS inserting said plurality of ~~related~~ records into a single table of [[an]]
the RDBMS;
the RDBMS receiving a user provided indication that particular ones of said plurality of records are related records;

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~~the RDBMS~~ associating said ~~plurality of~~ related records as a set within said single table, wherein each one of said ~~plurality of~~ related records is assigned a common identifier unique to said set which conforms to a data type in said table for associating said ~~plurality of~~ related records; and

responsive to a triggering condition identifying at least one of said ~~plurality of~~ related records, ~~the RDBMS~~ selectively purging particular non-identified related records of said set ~~from the single table~~.

9. (Currently Amended) A relational database management system (RDBMS), comprising:

[[a]] an RDBMS table for storing a plurality of records, wherein said table is configured with an identifier for specifying related ones of said plurality of records as a record set, wherein said identifier is unique to each said record set; and

an intra-table record set processor configured to perform an associate records function and a purge associated set function, said associate records function and said purge associated set function being published RDBMS functions accessible by at least one front-end system,

~~said associate records function~~ ~~an associate record set processor~~ for associating said related ones of said plurality of records with one another as a record set within said table,

~~said purge associated set function~~ ~~a purge record set processor~~ for purging selected ones of said record set in said table responsive to a triggering condition, wherein the triggering condition identifies at least one of said related ones of said plurality of records, and wherein the purge associated set function purges non-identified ones of the related records from the RDBMS table.

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10. (Original) The RDBMS of claim 9, further comprising:
a second pre-defined table within said RDBMS for maintaining associations of said related ones of said plurality of records within said table.
11. (Original) The RDBMS of claim 9, wherein said identifier is a data type.
12. (Currently Amended) The RDBMS of claim 9, said associate records function further comprising ~~a disassociate record set processor~~ programmatic code for disassociating selected records of said record set responsive to a triggering condition.
13. (Original) The RDBMS of claim 9, wherein said purge record set function deletes records linked to said purged records throughout said RDBMS.
14. (Currently Amended) A relational database management system (RDBMS), comprising:
a table for storing a plurality of records wherein particular ones of said plurality of records are related;
an associated record set processor for associating said related ones of said plurality of records with one another as a record set within said table;
a purge record set processor for purging selected ones of said record set in said table responsive to a triggering condition; and
a second pre-defined table within said RDBMS for maintaining associations of said related ones of said plurality of records within said table as said record set, wherein the RDBMS publishes at least one function to so that front-end systems are able to access the at least one RDBMS function, wherein the triggering condition identifies at least one of said related ones of said plurality of records, and wherein the purge associated set function purges non-identified ones of the related records from the RDBMS table.

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15. (Original) The RDBMS of claim 14, wherein said pre-defined table includes an identifier for specifying related ones of said plurality of records.

16. (Original) The RDBMS of claim 15, wherein said identifier is a data type.

17. (Original) The RDBMS of claim 14, further comprising:
a disassociate record set processor for disassociating selected records of said record set responsive to a triggering condition.

18. (Original) The RDBMS of claim 14, wherein said purge record set function deletes records linked to said purged records throughout said RDBMS.

19. (Currently Amended) A machine-readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

receiving a plurality of related records;

inserting said plurality of related records into a single table of an RDBMS;

associating said plurality of related records as a set within said single table using a published function of said RDBMS; and

receiving a triggering event from an application program, wherein the application program specifies one of the related records and a processing action to be performed by the RDBMS against the specified record;

responsive to the triggering event, the RDBMS automatically purging non-specified ones of the related records, condition, selectively purging particular related records of said set from said single table

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20. (Currently Amended) The machine-readable storage of claim 19, wherein the ~~triggering condition identifies at least one of said plurality of related records and said purging step purges non-identified~~ all related records of said set except for said specified record.

21. (Original) The machine-readable storage of claim 19, wherein said purging step purges each one of said plurality of related records.

22. (Original) The machine-readable storage of claim 19, wherein said table includes a data type for specifying said plurality of related records and said associating step further comprises assigning to each one of said plurality of related records a common identifier conforming with said data type, wherein said common identifier is unique to said set.

23. (Currently Amended) The machine-readable storage of claim 19, ~~further comprising: wherein said published function is accessible to front-end systems, wherein said front end system identifies the plurality of related records that the RDBMS associates as the set, wherein the published function also permits the front end system to disassociate~~ disassociating selected records from said set.

24. (Original) The machine-readable storage of claim 19, further comprising:
deleting throughout said RDBMS, records linked to said purged records using referential integrity rules.

25. (Original) The machine-readable storage of claim 19, said associating step further comprising:

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associating selected records of said set as a subset wherein said particular related records of said purging step include at least one selected record of said subset.

26. (Currently Amended) A machine readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

receiving a plurality of ~~related~~ records;

inserting said plurality of ~~related~~ records into a single table of an RDBMS;

the RDBMS receiving a user provided indication that particular ones of said plurality of records are related records;

the RDBMS associating said ~~plurality of~~ related records as a set within said single table, wherein each one of said ~~plurality of~~ related records is assigned a common identifier unique to said set which conforms to a data type in said table for associating said ~~plurality of~~ related records; and

responsive to a triggering condition identifying at least one of said ~~plurality of~~ related records, the RDBMS selectively purging particular non-identified related records of said set from the single table.

27. (Currently Amended) The method of claim 1, wherein during the associating step, intra-table record associations are recorded within a pre-defined RDBMS table. the associating step establishes an intra-table referential integrity among said related records, and wherein the intra-table referential integrity results in the purging step.

28. (Currently Amended) The method of claim 8, wherein during the associating step, intra-table record associations are recorded within a pre-defined RDBMS table. the associating step establishes an intra-table referential integrity among said related records, and wherein the intra-table referential integrity results in the purging step.

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29. (Currently Amended) The system of claim 9, wherein the ~~associate record set processor establishes intra-table referential integrity among said related records, and wherein the intra-table referential integrity causes the purge record set processor to purge the selected ones of the records responsive to the triggering condition.~~ associate records function and the purge associated set function are functions of an RDBMS query language.

30. (Currently Amended) The system of claim 14, wherein the at least one RDBMS function comprises an associate records function and the purge associated set function. ~~associate record set processor establishes intra-table referential integrity among said related records, and wherein the intra-table referential integrity causes the purge record set processor to purge the selected ones of the records responsive to the triggering condition.~~